



Bolivia: Mining Industry

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Summary

Mining has long been one of Bolivia's most important economic activities, today accounting for approximately 13 percent of total exports. Principal metals and minerals include zinc, silver, tin, gold, lead, antimony, and copper.

With mineral prices at record highs, Bolivian mining projects could represent lucrative investment and export opportunities for U.S. firms. Companies supplying mining equipment and services may find the Bolivian mining sector especially attractive, as U.S. products are generally well received and are known for their high quality and technical advantage. That said, companies considering entering the Bolivian market should carefully weigh the advantages and risks of doing business, particularly in light of Bolivia's current political and economic uncertainty.

Mining in the Bolivian Economy

Bolivia's economy grew 4 percent in 2005, its fastest rate of expansion since 1998. The mining sector accounted for approximately 4 percent of an estimated GDP of USD 8.5 billion and registered 4.3 percent growth.

Mineral exports ranked third in importance in 2005, representing approximately 13 percent of total exports, or USD 346 million of total exports of USD 2.7 billion. Hydrocarbons exports ranked first with 47 percent of total exports, and manufacturing exports followed with 34 percent. Table I summarizes Bolivian exports by sector.

*Table I
Exports by Sector
(in millions of USD)*

SECTOR	2000	2001	2002	2003	2004	2005	% CHANGE 2004 - 2005
Mining	260	189	200	229	296	346	16.89
Agriculture	112	53	61	94	131	170	29.77
Hydrocarbons	158	287	331	485	814	1,294	58.97
Manufacturing	716	697	727	781	942	923	-2.02
TOTAL	1,246	1,226	1,320	1,590	2,184	2,734	25.18

Source: National Institute of Statistics (INE)

Bolivia remains highly dependent on capital and consumer goods imports and on foreign direct investment (FDI). The United States is Bolivia's largest single investor, accounting for an average of 35 percent of net FDI inflows of USD 5.6 billion between 1996 and 2003.

Table II shows estimated private sector investment in the mining sector from 2001 to 2005.

Table II
Private Sector Investment in the Mining Sector
(in millions of USD)

YEAR	TOTAL INVESTMENT
2001	41
2002	32
2003	24
2004	148
2005	300

Source: Ministry of Mining and Metallurgy

Industry Structure

The 1992 Privatization Law (Law 1330), the 1994 Capitalization Law (Law 1544), and the 1997 Mining Code (Law 1777) and related regulations together establish the mining industry's regulatory framework. The Ministry of Mining and Metallurgy delineates general policies and guidelines, with the Superintendent of Mining, part of the National Sectoral Regulatory System (SIRESE), regulating and granting mining concessions after the Mining Technical Service (SETMIN) completes administrative and technical procedures.

The Bolivian Mining Corporation (Comibol), formerly the country's largest producer, is now the sole administrator of mining properties nationalized in 1952. According to the Bolivian Constitution, these may not be sold or privatized. Comibol administers and leases the properties by calling for tenders and signing fixed-time exploration and exploitation joint venture contracts. Comibol also administers properties acquired after 1952, leasing or selling them to Bolivian or foreign investors and leaving exploitation to others.

The private sector is comprised of medium and small companies and approximately 500 independent miners' cooperatives. The Medium Miners Association has nine associated mining and smelting companies which together employ an estimated 5,000 miners. Small firms are associated with relevant departmental mining chambers, which in turn are associated with the National Mining Chamber.

Over 500 mining cooperatives encompassing an estimated 45,000 miners are registered with the National Federation of Mining Cooperatives (FENCOMIN), a group that has grown steadily with the gradual closure of mines over the last fifteen years. The organization has 109 mining cooperatives mining base metals in the departments of Oruro and Potosí, 21 cooperatives mining ulexite and other non-metallic minerals near the Uyuni salt flats, and 376 cooperatives mining alluvial gold, tin, and tungsten in the department of La Paz.

Approximately 17,000 former Comibol employees and salaried miners employed by private companies are members of the Bolivian Miners Union (FSTMB), a fragmented and relatively radical group that has become an increasingly influential player in Bolivia's mining industry.

Concessions

Under the Bolivian Constitution, all mineral substances above or below ground are properties of the state. The latter grants concessions to both Bolivian and foreign firms and individuals, conferring the right to explore, exploit, refine, and sell all mineral substances within the concession's borders for an indefinite period. The cancellation of a concession occurs only if the required annual mining patent (approximately USD 24 per unit for the first five years and approximately USD 48 per unit each additional year) is not paid on time.

The Constitution prohibits foreigners from owning mining concessions within 50 kilometers of any of Bolivia's international borders, but joint ventures with local companies are permitted.

Table III shows the number of mining concessions granted by the Mining Technical Service (SETMIN) between 2000 and 2005.

*Table III
Mining Concessions Granted by SETMIN*

	2000	2001	2002	2003	2004	2005
NUMBER OF CONCESSIONS	990	966	823	1,149	1,210	1,118

Source: SETMIN

Taxes

The mining tax regime is competitive and comparable to those of neighboring countries.

Value-Added Tax: A value-added tax (VAT) is levied on the sale of movable goods and on the provision of services. VAT must also be paid on all imports (CIF value plus import duties). The nominal rate is 13 percent, but since VAT is calculated using the final invoice price, including VAT, the effective rate is 14.94 percent.

Transaction Tax: A transaction tax is payable on local sales of goods, real estate, and services but is not applied to local sales of minerals or metals destined for export. In general, exports are not subject to the tax. The nominal rate is 3 percent of gross sales and is generally included in the price of goods or transactions. Including VAT, the effective rate is 3.57 percent.

Corporate Income Tax: Corporations are subject to a 25 percent tax on profits, subject to some adjustments. Tax losses can be carried forward indefinitely. Mining companies pay the greater of 25 percent of profits (as laid down in Bolivia's general tax law) or the complementary mining tax (CMT), described below. The latter is, in essence, a prepayment of income tax. If the CMT paid in the current year is greater than the income tax due, companies may deduct the difference from the following year's taxable income. Expenses are generally deductible if necessary to earn or maintain Bolivian source income.

Withholding Tax: When a Bolivian company pays Bolivian source income to a foreign beneficiary, it must withhold tax at the rate of 12.5 percent (the tax law assumes that 50 percent of the amount remitted is profit, on which the 25 percent corporate income tax is calculated). Payments subject to withholding tax include service fees, rental fees, interest payments, royalties, and dividends. The tax is also levied on fees for technical, commercial, industrial, legal, and advisory services, even if rendered abroad. Dividends paid to local shareholders are not subject to withholding tax.

Surtax: Mining companies are subject to a 25 percent surtax when profits exceed a certain level.

Complementary Mining Tax: The complementary mining tax (CMT) is levied on the gross sales value of metals contained in concentrates and is calculated on a sliding scale that varies by mineral. As explained above, the CMT is creditable against corporate income tax.

Import Duties: Capital goods designated for industrial development may enter Bolivia duty-free under certain circumstances. Other capital goods are subject to five percent tariffs, and most other goods are subject to 10 percent tariffs. Duties are levied on the CIF value of imported goods. Bolivia is party to several agreements that partially or totally eliminate the payment of import duties. Goods designated as temporary imports are not subject to duties or VAT but must be re-exported within a certain period. Importers must post bankers' bonds for the amount of suspended customs duties and VAT.

Property Taxes: Property taxes range from 0.35 to 1.5 percent and are payable annually to local municipal governments. In January 2002, the Bolivian government expanded benefits under the Potosí Law (Law 877) to include tax incentives for investments, including deferred payment of VAT and consolidated customs taxes (GAC) on machinery imported during industrial installation periods.

Environmental Regulations

In 1996, new national environmental regulations required all proposed mining projects to prepare environmental impact studies before starting operations. Existing projects were required to upgrade to approved environmental quality control systems by the end of 2002, with any operation failing to meet new standards facing possible closure.

The regulations do not address widespread pollution problems associated with 500 years of mining near or in urban areas. The worst pollution, attributed to the accumulation of mine and mill tailings, is near Oruro and Potosí and along the southern part of the Desaguadero River, as well as at the heads of the Pilcomayo, Cotagaita, and Tupiza rivers.

Exploration and Development Activities

More than 50 mining companies were aggressively exploring in the mid-1990s. Today, as shown in Table IV, only seven firms are active.

*Table IV
Mining Companies Exploring in Bolivia*

MINING COMPANY	COUNTRY OF ORIGIN	MINERALS	WORKING AREAS
L&M Mining	New Zealand	Gold	Ulla Ulla, La Paz
Excalibur	Canada	Gold	San Simón, Beni
Newmont Mining	United States	Gold	Kori Chaca, Oruro
Pan American Silver	Canada	Zinc/Silver	San Vicente, Potosí
Sinchi Wayra	Bolivia	Tin/Zinc	Colquiri, Oruro
Coeur d'Alene	United States	Silver	San Bartolomé, Potosí
Apex Silver	United States	Zinc/Silver	San Cristóbal, Uyuni

Source: Ministry of Mines and Metallurgy

Mineral Production

Zinc continues to dominate the Bolivian mining industry, followed by tin and lead. Tin, formerly Bolivia's most important mineral, has regained importance only in the last few years, having declined significantly from historic highs of 30,000 metric tons per year.

Gold production was fairly level until 2002, when the Kori Kollo open pit mine (Newmont Mining) shut down. Kori Kollo has since returned to heap leaching gold from the Llallagua deposit and old mine tailings.

*Table V
Mineral Production Volume
(in metric tons)*

MINERAL COMMODITY	2000	2001	2002	2003	2004	2005
Zinc	149,134	141,983	141,708	145,490	147,430	130,094
Tin	12,503	12,039	13,210	16,386	18,115	15,219
Lead	9,523	9,090	9,286	9,353	10,252	8,875
Gold	12,000	12,374	11,269	9,361	6,163	6,821
Antimony	1,907	2,072	2,343	2,432	3,036	4,302
Copper	110	18	120	344	576	571
Tungsten	498	671	474	556	508	490
Silver	434	410	461	466	413	326
TOTAL	186,109	178,657	178,871	184,388	186,493	166,698

Source: National Institute of Statistics (INE)

Bolivia's mineral production value dropped almost 20 percent from 1997 to 2003, a decline caused by lower mineral prices, reduced mine output, and lower mineral grades. Table VI shows annual mineral production value per commodity. No data are available for 2004 or 2005.

*Table VI
Mineral Production Value
(in millions of USD)*

MINERAL COMMODITY	1997	1998	1999	2000	2001	2002	2003
Zinc	201.5	155.6	157.9	168.0	127.8	110.2	120.0
Tin	72.9	62.7	67.3	67.6	55.4	61.9	81.91
Gold	141.0	136.6	105.7	107.7	108.3	112.2	108.76
Silver	61.3	71.8	70.9	69.1	57.7	66.6	72.80
Antimony	10.7	6.5	2.3	1.6	1.7	2.8	3.63
Lead	11.5	7.3	5.1	4.3	4.2	4.5	5.01
Tungsten	2.7	2.4	1.4	1.9	3.9	1.5	2.21
Ulexite	6.0	8.2	7.0	7.3	5.6	6.0	10.85
Other minerals	2.2	1.1	3.8	3.1	5.3	5.0	3.6
TOTAL	509.8	452.2	421.4	431.1	369.9	370.8	408.77

Source: Ministry of Mines and Metallurgy

Most of Bolivia's mineral exports are in the form of primary concentrates, with the exception of tin exported as metallic tin, gold exported as bullion, and antimony exported as trioxide. Zinc, silver, and lead concentrates go mainly to Switzerland, the United Kingdom, and Belgium.

*Table VII
Total Mineral Exports
(in millions of USD)*

MINERAL COMMODITY	2000	2001	2002	2003	2004	2005
Zinc	170.59	118.95	112.08	124.18	151.64	198.70
Silver	65.11	49.50	63.67	71.78	89.12	88.22
Tin	10.29	5.16	9.29	15.34	30.74	23.79
Lead	4.51	3.79	4.41	4.32	9.18	10.39
Antimony	0.63	0.32	1.74	2.59	2.57	7.84
Gold	0.15	0.03	0.03	0.04	0.05	0.06
Other minerals	8.82	11.59	8.65	10.97	13.01	17.18
TOTAL	260.11	189.35	199.86	229.22	296.31	346.18

Source: National Institute of Statistics (INE)

Attempts to Rejuvenate the Sector

The Bolivian government created the Mining Investment Fund (FOMIN) in 2003 to finance feasibility studies and metallurgic mining projects for cooperative mines, transferring USD 3 million from the Comibol incentive fund to establish the operation.

In November 2005, the government created the Reactivation Fund for Small Mines (FAREMIN) to carry out the Technical Assistance Program for Small Mines (PIATECMIN), implemented by the National Mining Chamber and departmental chambers. The program offers loans of up to USD 10,000 to small miners.

Existing Projects

With the recovery of mineral prices in 2004, Bolivia's mining sector may expand, with several projects potentially attracting significant capital investments.

Private Projects

San Cristóbal: U.S.-based Apex Silver Mines, owner of the San Cristóbal concession (zinc, silver, and lead), holds Bolivia's largest pending mining project. Valued at approximately USD 800 million, the mine is expected to rank among the world's largest producers of silver and zinc, with production slated to begin in April 2007. San Cristóbal has 455 million ounces of silver, 3.5 million tons of zinc, and 1.3 million tons of lead in proven and probable reserves.

San Bartolomé: Coeur d'Alene Mines Corporation, a U.S. firm, acquired the San Bartolomé project (silver) in 1999 and began exploration and feasibility studies shortly thereafter. The company plans to invest approximately USD 135 million to exploit an estimated 152 million ounces of proven and probable reserves of silver. The company is associated with Comibol and several mining cooperatives from Potosí on the project. San Bartolomé is expected to be the largest new primary silver mine to be built in the Americas in decades.

San Vicente: Canada's Pan American Silver acquired the San Vicente silver-zinc mine in 1999 and began small-scale production in 2002. Two years later, the company entered into a joint venture agreement with EMUSA, a well established Bolivian mining firm, to conduct exploration and mill operation activities. The mine is expected to produce at an annualized rate of approximately 2.5 million ounces of silver. Estimated investment for this project is USD 35 million.

Don Mario: Orvana Minerals Corporation, a Canadian firm, began explorations at its Don Mario gold, copper, and silver project in the early 1990s, relinquishing controlling interest to Comsur, the largest privately held mining company in Bolivia, in early 2002. Operations began in mid-2003, with the mine producing approximately 69,000 ounces of gold in fiscal year 2005.

Kori Chaca: U.S.-based Newmont Mining Corporation began operating its USD 24 million Kori Chaca gold mine in mid-2005, with expectations of producing 224,000 ounces of gold over two years.

San Simón: Canada's Eaglecrest Explorations holds the San Simón concession (gold), where explorations began in mid-2003. The company expects to contract a mining industry consultant to prepare a preliminary feasibility study in early 2006.

Proyecto Poopo: Bolivia's Sinchi Wayra S.A. expects to invest USD 18 million in a lead and zinc mine with estimated combined mineral reserves of 240,000 metric tons.

Amayapampa: Luzon Minerals, a Canadian firm, plans to invest USD 25 million to extract approximately 548,000 ounces of gold from its Amayapampa property.

Comibol Projects

Mutún: India's Jindal Steel and Power won the right to develop Mutún, one of the world's largest iron ore deposits, in mid-2006. The firm expects to invest USD 2.3 billion over the next ten years to exploit the deposit's estimated 40 billion tons of iron ore and produce and export sponge iron and steel.

Huanuni: Site of Bolivia's largest tin reserves, Huanuni produces an estimated 3,600 metric tons of tin concentrates annually. Comibol has operated the mine since 2002, when one of its owners, RBG Resources (formerly Allied Deals), went bankrupt.

Karachipampa: Comibol's lead-silver smelter was built in 1983 by a German/Belgium consortium at a cost of approximately USD 200 million. The plant has an annual production capacity of 51,000 tons of lead-silver concentrate, but falling mineral prices and insufficient raw material put the project on hold, and the plant was never fired. Comibol recently signed a joint venture operating agreement with a U.S. firm.

Potential Investment Projects

The following projects may represent investment opportunities for interested firms:

Salar de Uyuni: The salt flats' 10,000 square kilometers hold estimated mineral reserves of 8.9 million tons of lithium, 194 million tons of potassium, 7.7 million tons of borax, and 211 million tons of magnesium. Bolivian government officials estimate needed investments at USD 50 to 300 million, depending on the project.

Cerro Rico: According to Bolivian government estimates, Cerro Rico may contain many millions of ounces of unexploited silver reserves.

Colas de Colquiri: The project's zinc and tin deposits may require a USD 20 million investment.

Future Trends

Private sector interest in minerals exploration will depend on the resolution of ongoing political and economic uncertainty and on the availability of basic geological, geophysical, and geochemical information.

Local experts consider the Pre-Cambrian Shield in eastern Bolivia an area of vast potential. Exploration could reveal lucrative palladium, platinum, nickel, and other mineral deposits.

Exploitation of high-quality amethyst, citrine, and the so-called “Bolivianita” (ametrine) has increased in recent years and may continue to expand.

Commercial Opportunities

Bolivia continues to be a modest source of minerals, both refined and in concentrate, for the U.S. economy. Bolivian mineral exports to the United States jumped from USD 58 million to USD 94 million from 2003 to 2005, increasing 62 percent over three years.

The Bolivian mining sector has been an important market for U.S. exports of machinery and equipment, as well as for milling plants, although political and economic instability and concerns about future economic policies have slowed investment and sales.

Mining equipment, machinery, and components may be imported freely. The one exception is explosives, which require a special license. Total imports from the United States and major competitors are shown in Table VIII.

*Table VIII
CIF Imports by Country*

COUNTRY	CIF IMPORT VALUE (in millions of USD)	PERCENTAGE SHARE OF MARKET
LATIN AMERICA	1,673.5	53.40
Argentina	354.9	
Brazil	376.0	
Chile	682.3	
Peru	104.6	
Others	155.7	
Canada	29.7	0.90
U.S.	626.6	20.0
EU	308.5	9.80
Germany	55.8	
France	26.7	
Holland	8.0	
U.K.	16.7	
Others	201.3	
ASIA	497.6	15.90
Japan	472.1	
Others	25.5	

Source: Bolivian Customs Service; statistics not broken down by sector

For More Information

The U.S. Commercial Service in La Paz, Bolivia can be contacted via e-mail: sanmartinlm@state.gov; phone: 591 2 216 8986; or fax: 591 2 216 8624. The section maintains a website at <http://bolivia.usembassy.gov>.

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